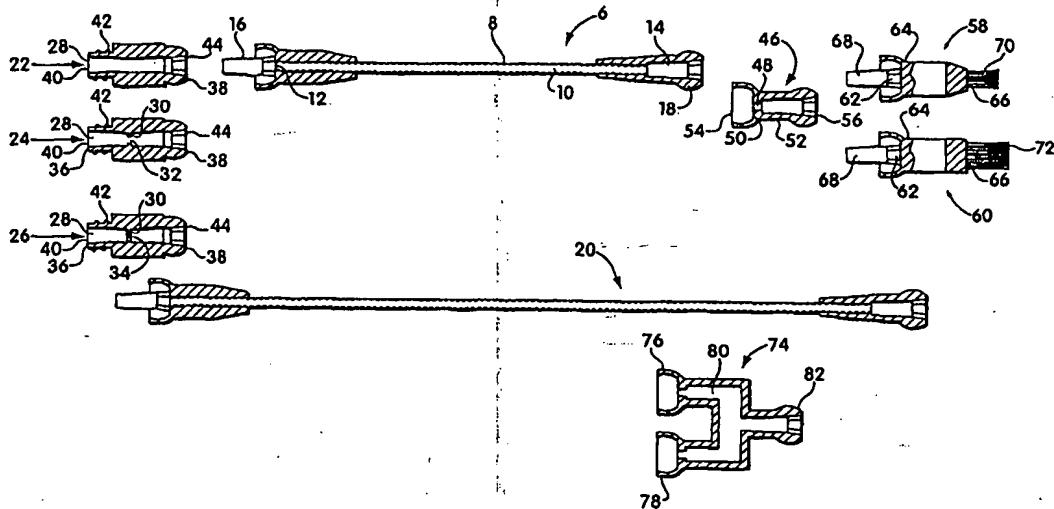




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(54) Title: UNIVERSAL MODULAR SURGICAL APPLICATOR SYSTEMS



(57) Abstract

A modular system is described for construction of fluid applicators for open or endoscopic surgery from modular components. Lengths of tubing of various lengths, and devices to be carried by said tubing, are pre-fitted with standard adapters to mate with each other, thereby forming cannula sections and applicator sections. Interconnectors may also be provided, particularly for provision of articulation. The tubing is preferably rigid, but may also be either flexible or permanently bendable. A device can then be constructed by selection of a suitable set of tubing lengths, adapters and applicators. Devices customizable for particular uses can be created with minimal expense. The system is especially suitable for delivery of fluids to tissue in endoscopic or other minimally invasive surgical procedures. Delivery of fluids forming structure at a tissue site, especially as a hydrogel, is a preferred use of the devices.